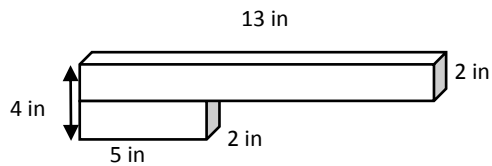


Name _____

Date _____

1. Find the total volume of the figures and record your solution strategy.

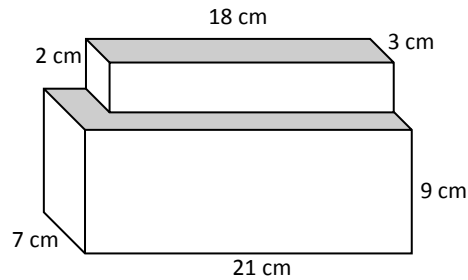
a.



Volume: _____

Solution Strategy:

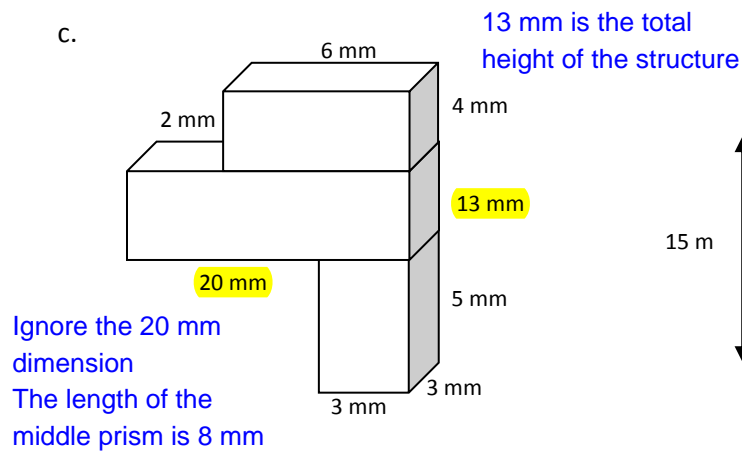
b.



Volume: _____

Solution Strategy:

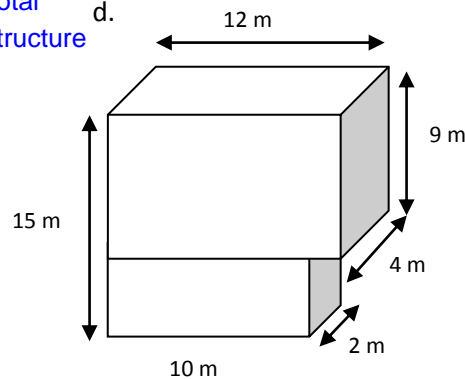
c.



Volume: _____

Solution Strategy:

d.

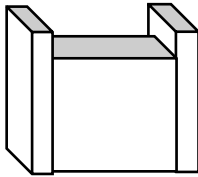


Volume: _____

Solution Strategy:

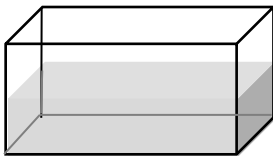
2. A planting box (pictured below) is made of two sizes of rectangular prisms. One type of prism measures 3 inches by 6 inches by 14 inches. The other type measures 18 inches by 9 inches by 10 inches. What is total volume of three such boxes?

Assume the 3 in. x 6 in. x 14 in. prisms form the left and right sides of the planter and that there is one 18 in. x 9 in. x 10 in. prism between the sides.



3. The combined volume of two identical cubes is 250 cubic centimeters. What is the measure of one cube's edge?

4. A fish tank has a base area of 45 cm^2 and is filled with water to a depth of 12 cm. If the height of the tank is 25 cm, how much more water will be needed to fill the tank to the brim?



5. Three rectangular prisms have a combined volume of 518 cubic feet. Prism A has one-third the volume of Prism B, and Prisms B and C have equal volume. What is the volume of each prism?

Note that Prism B is three times as large as Prism A and also that Prism B and Prism C are equal. So, if Prism A has a volume of 10 cubic feet, what are the volumes of Prisms B and C? What is the combined volume?

Use Guess and Check to find a combined volume of 518 cubic feet.